## ALGORITHM FOR SORTING BIT SEQUENCES IN LINEAR COMPLEXITY

## **Abstract of the Disclosure**

A method and associated algorithm for sorting S sequences of binary bits. The S sequences may be integers, floating point numbers, or character strings. The algorithm is executed by a processor of a computer system. Each sequence includes contiguous fields of bits. The algorithm executes program code at nodes of a linked execution structure in a sequential order with respect to the nodes. The algorithm executes a masking of the contiguous fields of the S sequences in accordance with a mask whose content is keyed to the field being masked. The sequential order of execution of the nodes is a function of an ordering of masking results of the masking. Each sequence, or a pointer to each sequence, is outputted to an array in the memory device whenever the masking places the sequence in a leaf node of the nodal linked execution structure.

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